

## **BLANK PAGE**



FOR OFFICIAL USE

IS: 7171 - 1974

Indian Standard



## SPECIFICATION FOR DRIP COUNTER WITH FILTER

- 1. Scope Prescribes dimensional and other requirements of two sizes of drip counter with filter in a combined unit used in blood transfusion apparatus.
- 2. Material -The drip counter with filter shall be made from the following materials,
- 2.1 Glass- Clear, colourless, neutral glass (for definitions, see IS: 1382-1961 Glossary of terms relating to glass industry). The glass shall pass the alkalinity test prescribed in IS:2303-1963 'Method of grading glass for alkalinity 'as Type 1 glass.
- 2.2 Gauze Filter Shall be made from stainless steel wire conforming to IS: 6528-1972 ' Specification for stainless steel wire of 0.200 to 0.250 mm diameter and having 48 to 50 mesh per linear 25 mm.
- 2.3 Rubber Pure, first grade natural rubber, effectively vulcanized, non-porous and homogeneous, satisfying the requirements given in 2.3.1.
- 2.3.1 Composition of rubber The rubber shall be in the form of pale crepe and not smoked sheet. The rubber shall be free from reclaimed rubber, vulcanized waste or rubber substitute. The material of the mix shall be entirely free from organic divestuffs, for example, M. B. T. (mercaptobenzthiazole) and D. P. G. (diphenylguanidine) accelerators, red oxide and any other pigment or colouring matter. Zinc dimethyl (or diethyl) dithiocarbonate only shall be used as an accelerator. Inorganic fillers shall be limited to china clay and zinc oxide. The filling material shall be entirely free from carbon, lead, arsenic, antimony, mercury, copper and manganese. The rubber shall not be painted on the surface. The rubber hydrocarbon content of the finished rubber shall be not less than 80 percent.
- 2.4 Cap Brass conforming to IS: 410-1967 'Specification for rolled brass plate, sheet, strip and foil ( second revision )'.
- 3. Shape and Dimensions As shown in Fig. 1.
- 4. Workmanship and Finish
- 1.1 The glass parts shall be well annealed and substantially free from bubbles, stones, seeds, cords or striae and other defects. They shall be free from objectionable internal strains in the glass ( for definitions, see IS: 1382-1961).
- 4.2 The walls of the glass shall be reasonably uniform and the edges shall be smoothly rounded in the flame or ground.
- 4.3 The surfaces of the drip counter shall be finished smooth.
- 4.4 The filter when fitted with housing for filter, shall be firmly seated.
- 4.5 The form, pitch and dimensions of the screw thread on the neck of the body and the cap shall be according to IS: 5851-I 970 'Finishes with external screw thread for glass containers and gauges for inspection of screw closures 'for shallow glass finish. The screw thread shall be well formed and the cap shall screw on and off the body easily.
- 4.6 The cap shall be plated chromium over nickel in accordance with Service Grade No. 2 of IS: 4827-I 968 Specification for electroplated coatings of nickel and chromium on copper and copper alloys'.

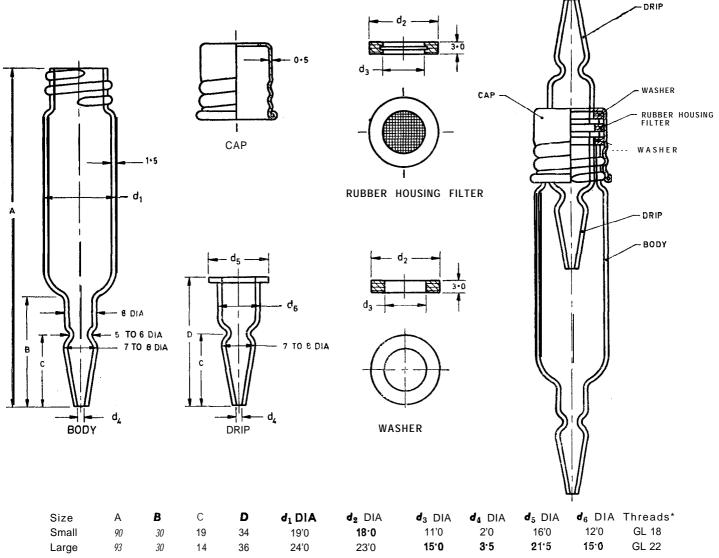
## 5. Tests

- 5.1 Thermal Shock Test The drip counter shall be boiled in water for 30 minutes, then transferred immediately in water at about 20°C. It shall not show any chipping or cracking.
- 5.2 Dry Heat Test -The drip counter shall be subjected to dry heat in a sterilizing oven at 180 + 2°C for 30 minutes. It shall not show deterioration in any way nor shall it show any chipping or cracking.

Adopted 15 January 1974

@ July 1974, ISI

Price Rs 3.00



\*See IS: 5851-1970 'Finishes with external thread for glass containers and gauges for inspection of screw closures'.

All dimensions in millimetres.

FIG. 1 DRIP COUNTER WITH FILTER

- 5.3 Autoclave Test-The combined unit of the drip counter shall be autoclaved for 30 minutes at a steam pressure of 140 kN/m² (1.4kgf/cm²). On completion of the test, the glass parts shall show no sign of cracking and the rubber parts shall not show any sign of tackiness, stiffness or cracks.
- $5.4\ \textit{Quality of Rubber}$  The rubber used shall be of uniform quality and shall satisfy all the tests for rubber components given in IS: 6058-1970 ' Specification for rubber components for transfusion fluid bottles'.
- 6. **Marking** The drip counter shall be marked with the name of the manufacturer, initials or recognized trade-mark.
- 6.1 *ISI Certification Marking* Details available with the Indian Standards Institution.
- 7. **Packing** As agreed to between the purchaser and the supplier.

"CED Standard"